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SOUTH BOSTON PIERS

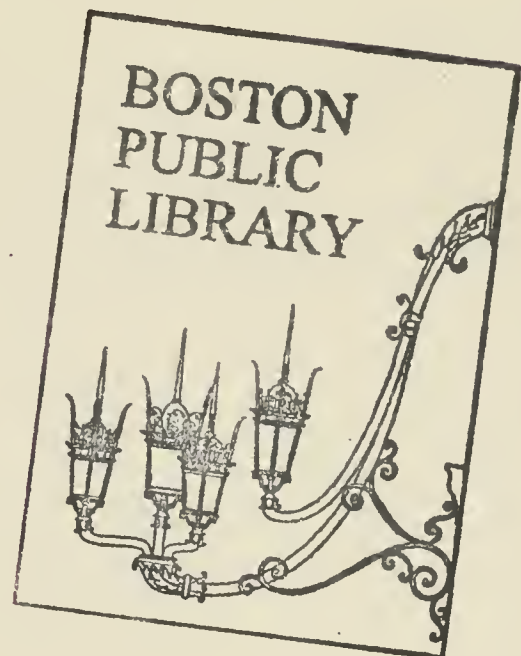
TRANSPORTATION ALTERNATIVES

ENVIRONMENTAL IMPACT REPORT

PUBLIC SCOPING SESSION

DECEMBER 10, 1987

MASSACHUSETTS BAY TRANSPORTATION AUTHORITY





PROJECT TEAM

<u>FUNCTION</u>	<u>LEAD ORGANIZATION</u>
Proponent	MBTA
Project Management & Engineering	URS Consultants
Environmental Impacts	Rizzo Associates Boston Affiliates
Transportation Impacts	Multisystems
Operational Analysis	
Rail	Transportation & Distribution Associates
Bus	Multisystems
Station Design	Childs Bertman Tseckares & Casendino (CBT)
Community Participation	Childs Bertman Tseckares & Casendino (CBT)



## SOUTH BOSTON PIERS/FORT POINT CHANNEL AREA

### TRANSPORTATION ALTERNATIVES

### ENVIRONMENTAL IMPACT REPORT

#### PURPOSE

The purpose of this study is to evaluate the environmental and transportation impacts of several alternatives for providing public transit service to future development proposed in the South Boston Piers area.

#### PROJECT AREA

The service area of the proposed transit alternatives includes the South Boston Piers area north of Summer Street, east of the Fort Point Channel and west of the Reserved Channel (see attached map). Other areas which may be impacted by the selection of a specific alternative include Chinatown, Financial District, Park Square and North Station. In addition, communities served by the Red Line south of South Station may experience minor service adjustments should the Red line be the selected alternative. The South Boston residential community is also concerned since the success of this project will help to minimize automobile traffic on their streets.

#### ALTERNATIVES

1. No Action - incremental adjustment of current bus services.
2. Conventional Bus/TSM - extensive local bus service from North and South Stations and Park Square and express bus service from suburban locations, augmented by Transportation System Management (TSM) actions such as bus lanes and traffic/parking enforcement.
- 2A. At-Grade Light Rail - Green Line-type vehicles operating at surface level from EDIC, paralleling new Northern Avenue and crossing the Fort Point Channel on either the new Northern Avenue bridge or its own bridge, connecting with a surface line operating between South and North Stations above the depressed artery. Possible station locations include EDIC, World Trade Center, Pier 4/Fan Pier, Northern Avenue/Atlantic Avenue, South Station, Aquarium, Haymarket and North Station.
3. Elevated People Mover - small, automatically operated subway cars following the same alignment as alternative 2A (except elevated) in the Piers area and across the Fort Point Channel, then proceeding along Atlantic Avenue to a station in Dewey Square, then extending along Essex Street to a point between the Boylston (Green Line) and Chinatown



Stations (Orange Line). Station locations will be the same in the Piers Area as Alternative 2A, plus stops at Dewey Square and Boylston/Chinatown.

4. Underground People Mover - same technology, alignment and stations as Alternative 3, except entire alignment will be underground and will cross under Fort Point Channel in its own tunnel south of the new Northern Avenue Bridge.
5. Red Line Loop - existing Red Line technology, the alignment will break away from the existing Red Line north of Broadway Station, proceeding under the Seaport Access Road, curving back toward South Station in the vicinity of new Northern Avenue. One new station will be located near the junction of Pier 4, World Trade Center and the McCourt Property.





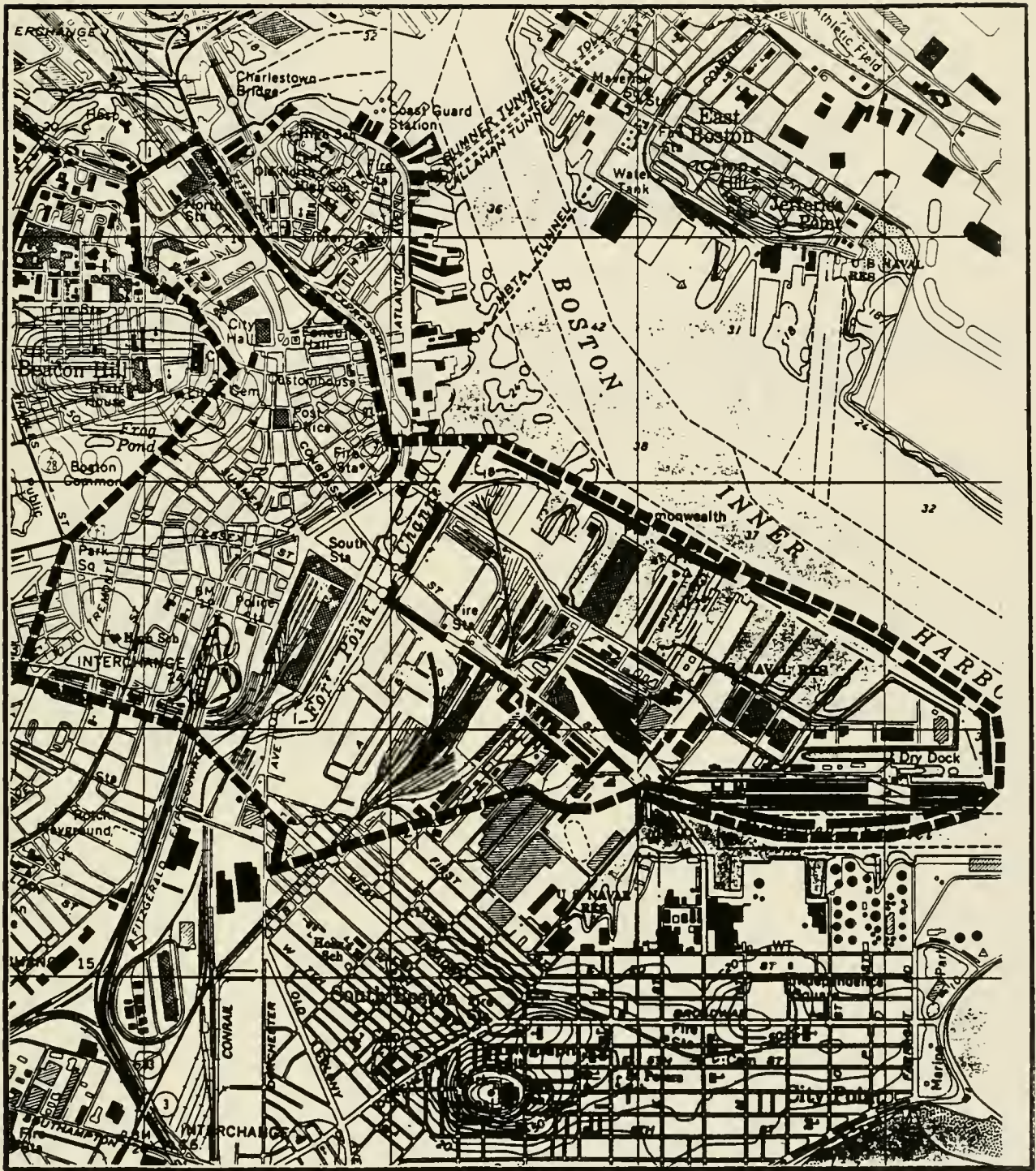
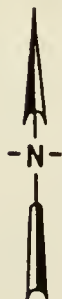


FIGURE 1: LOCUS MAP

LEGEND

— — — — SERVICE AREA

- - - - - POTENTIAL IMPACT AREA



BASE MAP: USGS TOPOGRAPHIC MAP

SCALE: 1" = 2000'



# **PROJECT PURPOSE** **AND NEED**

**Provide public transportation service to existing  
and proposed developments in the  
South Boston piers area:**

**Fan Pier  
Pier 4  
World Trade Center  
McCourt Property  
Summer St. Office  
Conversion**

**Boston Wharf Co.  
Museum Wharf  
Fish Pier  
Boston Marine  
Industrial Park**



# **SELECTION CRITERIA**

**Ridership Potential**

**Implementation Schedule**

**Cost-Effectiveness**

**Environmental and  
Community Impacts**





# Criteria for Evaluation

## Environmental

- Air Quality
- Noise and Vibration
- Ecosystems
- Water Resources
- Land Use and Economic Development
- Neighborhoods
- Visual and Aesthetic
- Historic, Archaeological and Cultural
- Parklands
- Energy

## Transportation

- Ridership
- Traffic
- Capital Cost
- Operating Cost



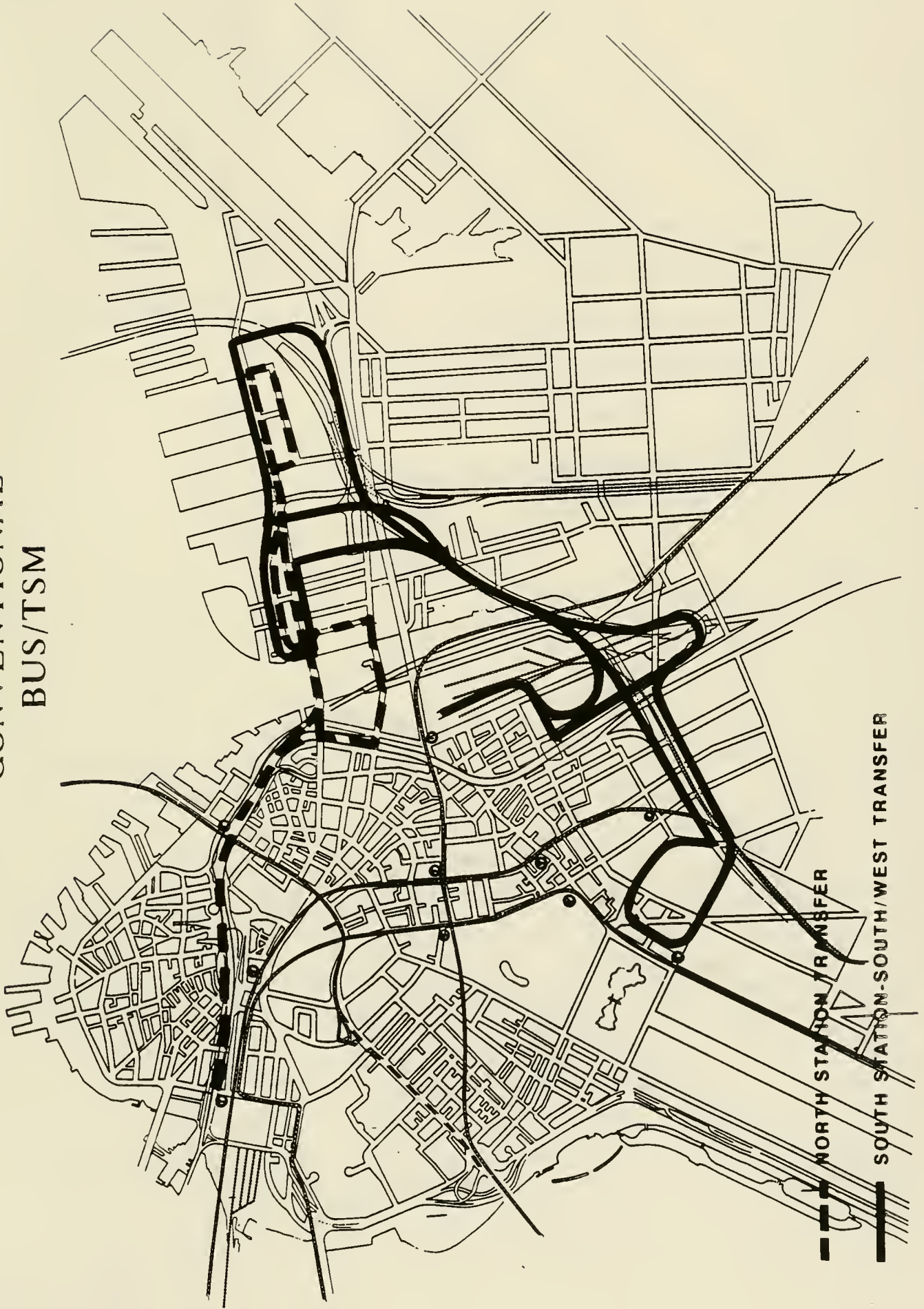


# **ALTERNATIVES**

- 1. NO ACTION**
- 2. CONVENTIONAL BUS/TSM**
- 2A. AT GRADE LIGHT RAIL**
- 3. ELEVATED PEOPLE MOVER**
- 4. UNDERGROUND PEOPLE MOVER**
- 5. RED LINE LOOP**



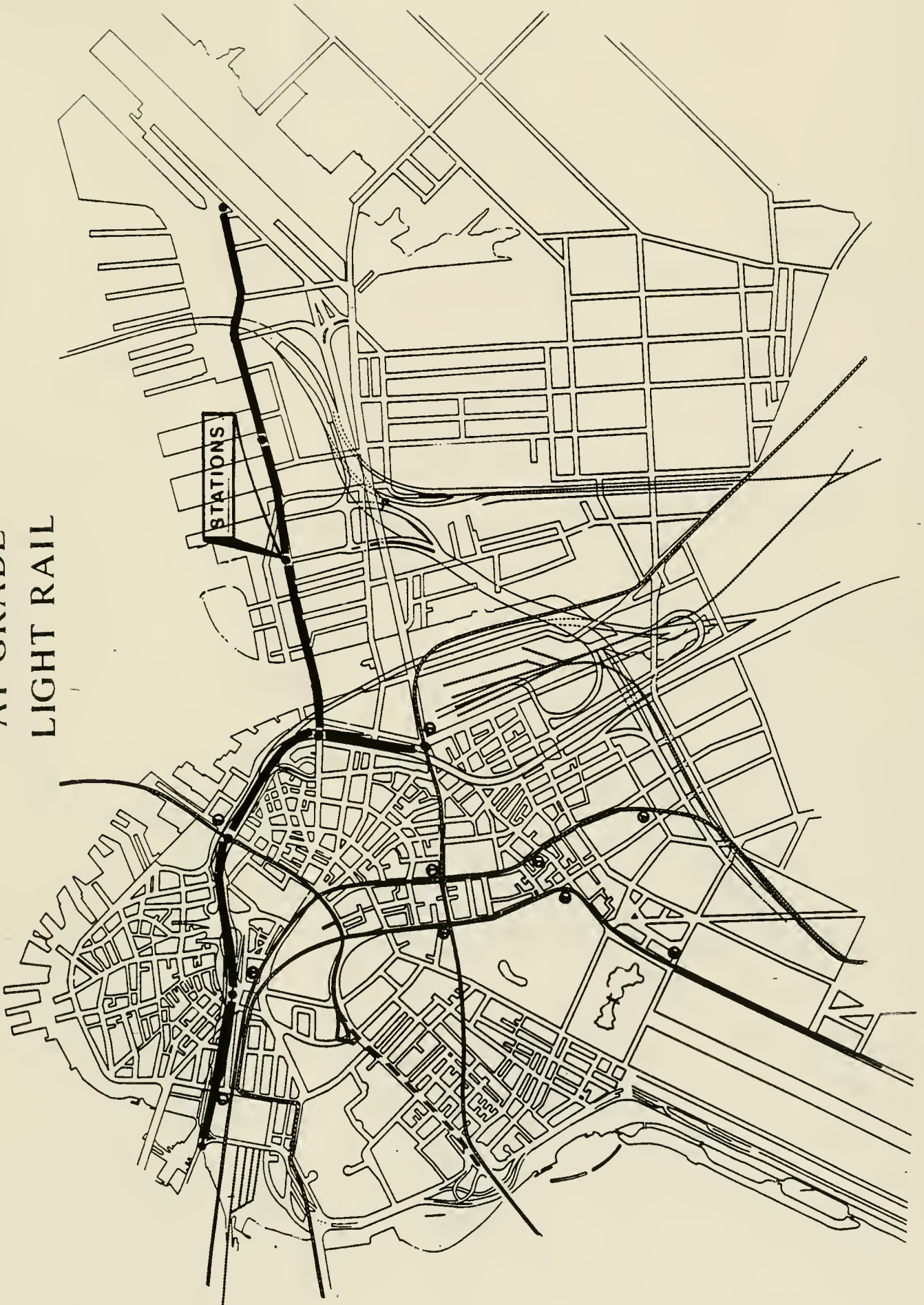
# CONVENTIONAL BUS/TSM





2A

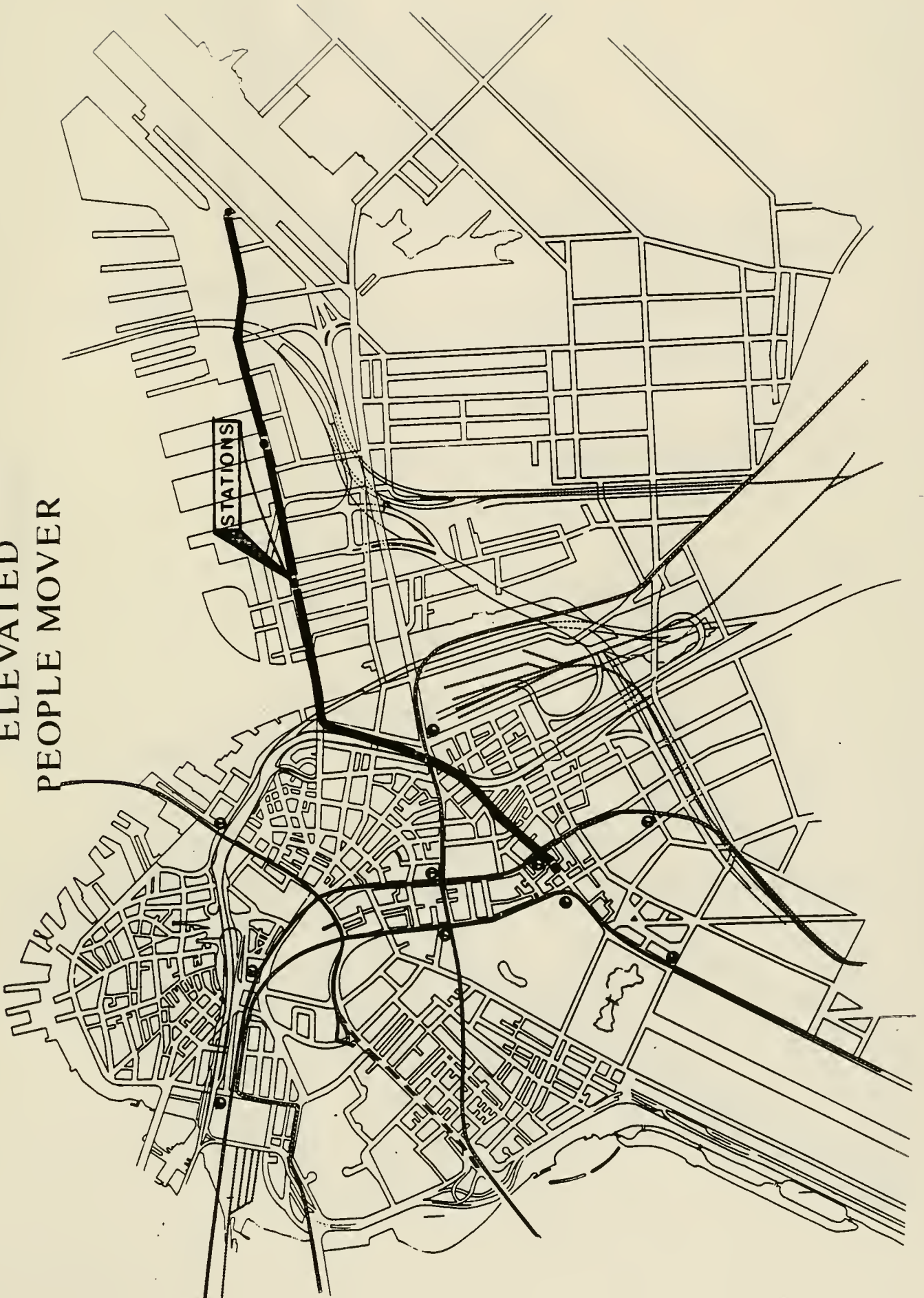
AT-GRADE  
LIGHT RAIL







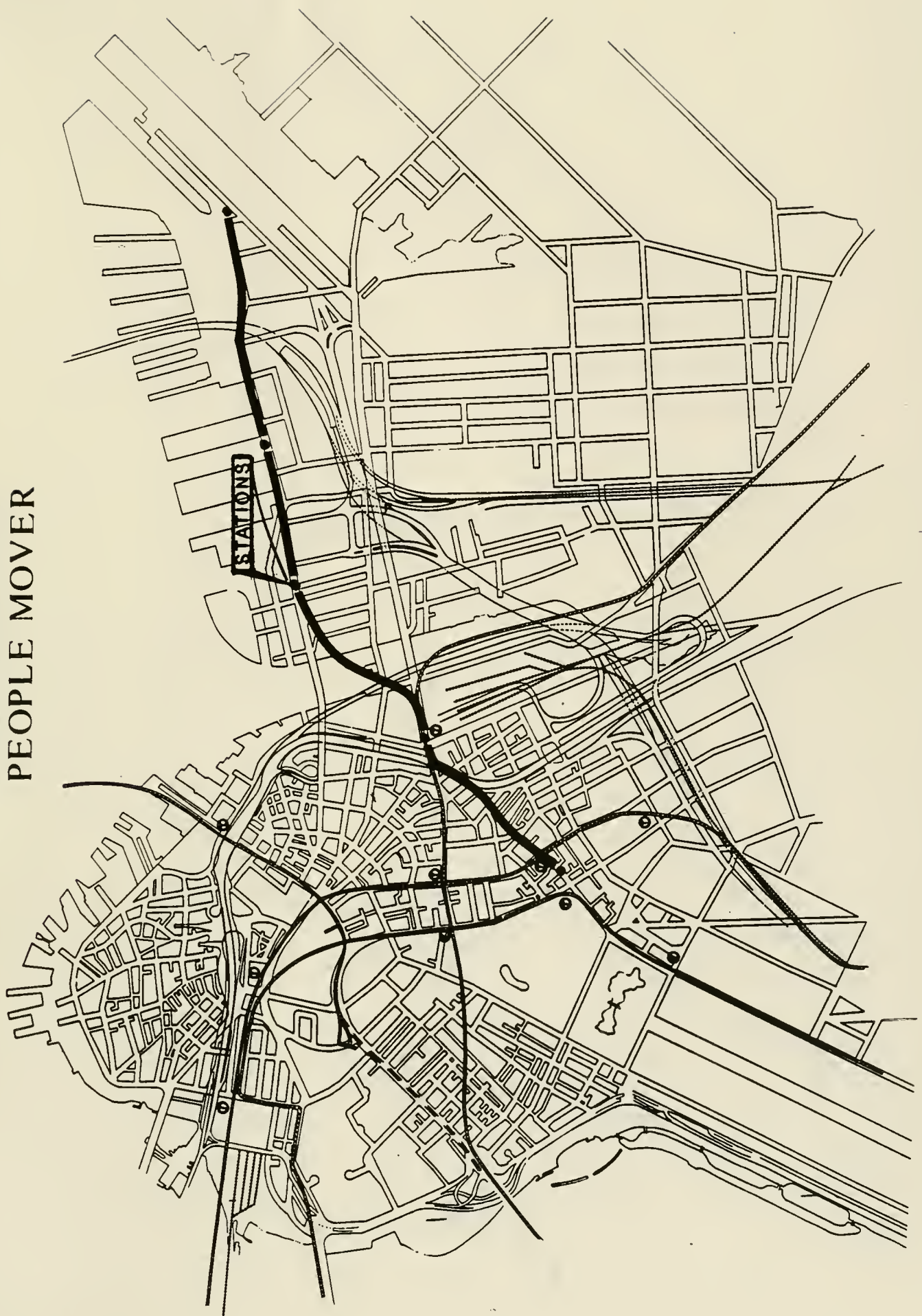
ELEVATED  
PEOPLE MOVER





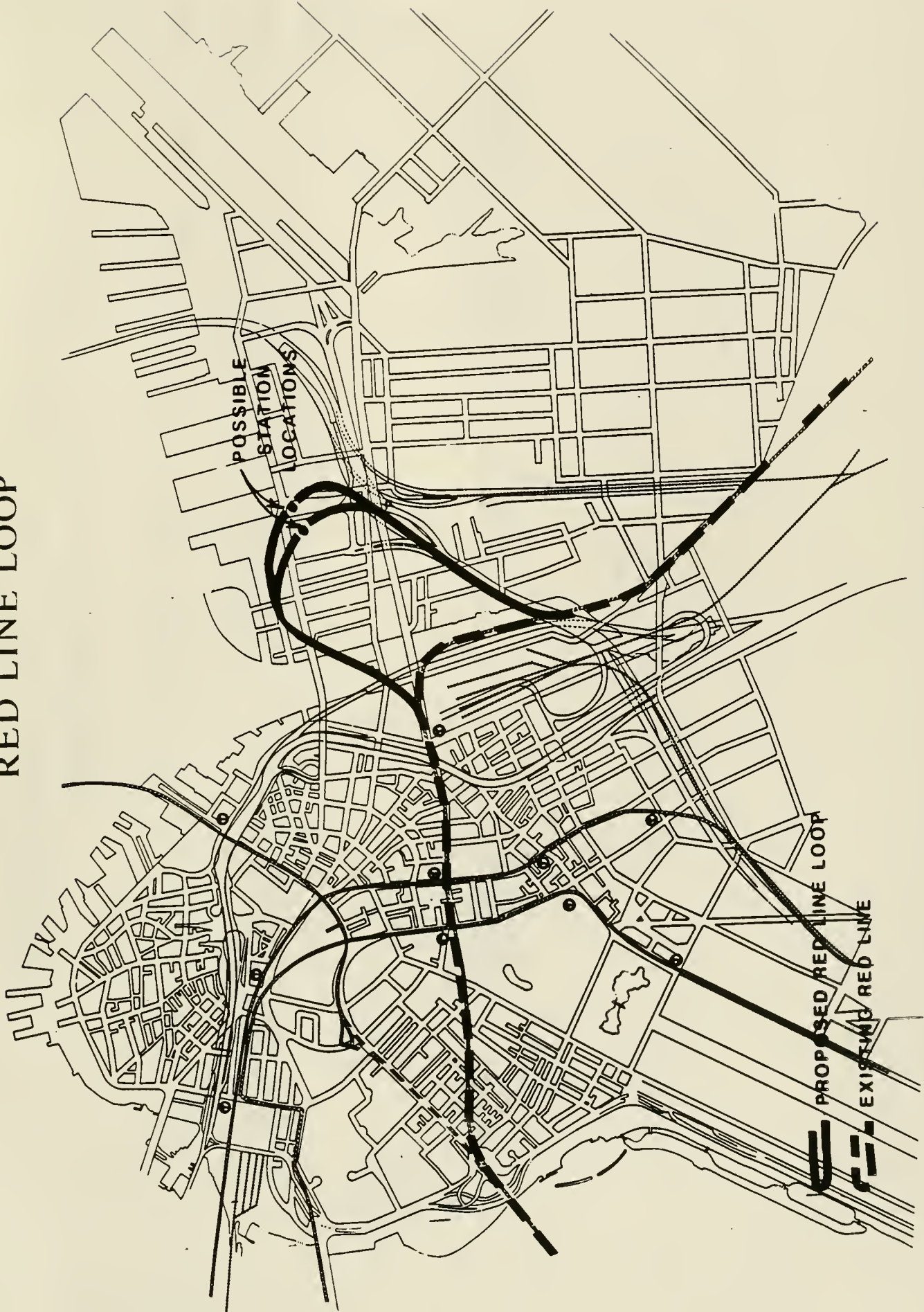


UNDERGROUND  
PEOPLE MOVER





# RED LINE LOOP



POSSIBLE  
STATION  
LOCATIONS

PROPOSED RED LINE LOOP  
EXISTING RED LINE

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# SCHEDULE

## SOUTH BOSTON PIERS/FORT POINT CHANNEL AREA

### TRANSPORTATION STUDIES

